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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Christoph Brabec

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EXAMINER

MOWLA, GOLAM

ART UNIT

PAPER NUMBER

4132

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/522,862	Applicant(s) BRABEC, CHRISTOPH	
	Examiner Golam Mowla	Art Unit 4132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/11/2005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The abstract of the disclosure is objected to because it is too short. Correction is required. See MPEP § 608.01(b).
3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 4, 8-11, 14, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Ou (US PG PUB 2002/0088863).

As to claim 1, Ou discloses a chip card (IC card 1, fig. 1) comprising an energy converter (solar battery 12, fig. 1) that occupies a portion of the surface area of the chip card (see fig. 1), so that an energy supply of the chip card is integrally present thereon (paragraph 0019).

As to claim 2, Ou further discloses that the energy converter is a photovoltaic cell (solar battery 12, which inherently comprises solar/photovoltaic cell).

As to claim 4, Ou further discloses that the energy converter covers (12) part of the front side of the chip card (1) (see fig. 1).

As to claim 8, Ou further discloses that the energy converter (12) is producible directly on the chip card (1) (see fig. 1, and paragraph 0020).

As to claims 9 and 11, Ou discloses an article, comprising:

- a chip card (IC card 1, fig. 1) having a surface; and
- a photovoltaic/solar cell (solar battery 12, which inherently comprises solar/photovoltaic cell) supported by a portion of the surface of the chip card (1) (see fig. 1).

As to claim 10, Ou further discloses that photovoltaic cell (12) acts as an energy supply for the chip card (1) (see paragraph 0020).

As to claim 13, Ou further discloses that the photovoltaic cell (12) is integral with the chip card (1) (see fig. 1, which shows that solar battery 12 is integrated with the chip card; see also 0019).

As to claim 14, Ou further discloses that the photovoltaic cell (12) is disposed on the chip card (1) (see fig. 1 and paragraph 0019). In addition, instant claim is a product-

by-process claim. Therefore, the claim is not limited to the manipulation of the recited method of disposing the photovoltaic cell on the chip card such as printing. The determination of patentability is based on the product, and not on the method (method of disposing the photovoltaic cell on the chip card such as printing method) of making the product. See MPEP 2113 [R-I] Product-by-Process Claims. See also *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964,966 (Fed. Cir. 1985).

As to claim 18, Ou further discloses that the article further comprise a display unit (display screen 11, fig. 1, paragraph 0019).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ou as applied to claim 1 above, and further in view of Nakamura et al. (US 6291763).

As to claim 3, Ou discloses a chip card, as discussed above for claim 1. Ou is silent as to whether the photovoltaic cell is a polymer solar cell.

However, it is well known in the photovoltaic art to utilize a polymer solar cell (photoelectric conversion device containing polymer therein, see abstract and example 1 on Col. 33) to increase the conversion efficiency and also the flexibility as taught by Nakamura (See also Col. 6, lines 4-21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the polymer solar cell of Nakamura in the chip card of Ou, because it allows for increased conversion efficiency and flexibility, as taught by Nakamura.

As to claim 12, Ou discloses an article, as discussed above for claim 1. Ou is silent as to whether the photovoltaic cell is a polymer solar cell.

However, it is well known in the photovoltaic art to utilize a polymer solar cell (photoelectric conversion device containing polymer therein, see abstract and example 1 on Col. 33) to increase the conversion efficiency and also the flexibility as taught by Nakamura (See also Col. 6, lines 4-21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the polymer solar cell of Nakamura in the article of Ou, because it allows for increased conversion efficiency and flexibility, as taught by Nakamura.

9. Claims 5, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ou as applied to claim 1 above, and further in view of Hirano (US 4104083).

As to claims 5, 15, and 17, Ou discloses a chip card or an article, as discussed above for claims 1 and 10. Ou is silent as to whether the photovoltaic cell is semitransparent and/or opaque.

However, it is well known in the photovoltaic art to utilize a semitransparent or opaque photovoltaic cell to improve the weatherability of the photovoltaic cell. Hirano discloses a solar battery package wherein the back layer comprises an opaque or semitransparent material (see abstract, and Col. 4, lines 8-19). Hirano uses opaque or semitransparent layer in the solar battery because it allows for an improved weatherability (see abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the opaque or semitransparent photovoltaic cell of Hirano in the chip card or article of Ou, because it allows for an improved weatherability, as taught by Hirano.

10. Claims 6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ou as applied to claim 1 above, and further in view of Kan et al. (JP 2001-203377A, refer to machine translation).

As to claims 6 and 16, Ou discloses a chip card or an article, as discussed above for claims 1 and 10. Ou is silent as to whether the photovoltaic cell is a colored.

However, it is well known in the photovoltaic art to utilize a coloring matter in the photovoltaic cell to increase the mechanical strength. Kan discloses a photovoltaic cell (photoelectric conversion device, see title and abstract) wherein coloring matter (4, fig.

1) is added to the semiconductor layers to enhance the mechanical strength (see abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the colored photovoltaic cell of Kan in the chip card or article of Ou, because it allows for an enhanced mechanical strength, as taught by Kan.

11. Claims 7 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ou as applied to claims 1 and 9 above, and further in view of Phillipps (GB 2320356A, listed in IDS).

As to claim 7, Ou discloses a chip card, as discussed above for claim 1. Ou further discloses that the chip card (1) further comprises an energy converter (12) and a display unit (display screen 11) (sees also fig. 1 and paragraph 0019).

Ou is silent as to whether the photovoltaic cell is applied over the display unit.

However, it is well known in the chip card art to apply the photovoltaic cell over the display unit. Phillipps discloses a combined liquid crystal display and photovoltaic converter wherein the photovoltaic cell is applied over the display unit (see fig. 2; see also Page 1, lines 14-20, and page 4, lines 6-9). Phillipps applies the photovoltaic cell over display unit because such is conventional in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply the photovoltaic cell of Ou over the display unit of Ou as it is conventional in the art, as shown by Phillipps.

As to claim 19, Ou discloses an article, as discussed above for claim 9. Ou further discloses that the article further comprises a photovoltaic cell (12) and a display unit (display screen 11) (see also fig. 1 and paragraph 0019).

Ou is silent as to whether the photovoltaic cell is supported by the display unit.

However, it is well known in the chip card art to apply the photovoltaic cell over the display unit so that the photovoltaic cell is supported by the display unit. Phillipps discloses a combined liquid crystal display and photovoltaic converter wherein the photovoltaic cell is applied over the display unit (see fig. 2; see also Page 1, lines 14-20, and page 4, lines 6-9) to provide support for it. Phillipps applies the photovoltaic cell over display unit because such technique is conventional in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply the photovoltaic cell of Ou over the display unit of Ou to provide support for it, as it is conventional in the art, as shown by Phillipps.

12. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ou as applied to claim 9 above.

As to claim 13, Ou further discloses that the photovoltaic cell (12) is mounted on the chip card (1) (see fig. 1; and paragraph 0019).

Ou is silent as to whether the photovoltaic cell is integral with the chip card.

However, it is well known in the art to integrate a part of the device over another part. See MPEP 2144.04 – Making Integral. “The use of a one piece construction instead of the structure disclosed in [the prior art] would be merely a matter of obvious

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engineering choice” – MPEP 2144.04. See also *In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965).

Therefore, it would have been obvious to one ordinary skill in the art the time of the invention was made to integrate the photovoltaic cell of Ou into the chip card of Ou to prevent the photovoltaic cell deterioration.

13. Claims 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ou as applied to claim 9 above, and further in view of Suzuki (US 4801787).

As to claim 20, Ou discloses an article comprising a chip card, as discussed above for claim 9. Ou is silent as to whether the chip card is selected from credit or security cards.

However, it is well known in the chip card art that credit or security card is a type of chip card as disclosed by Suzuki (Col. 1, lines 7-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the credit card of Suzuki as the chip card in the article of Ou, because it conventional in the art to use credit card as the chip card, as taught by Suzuki.

Correspondence/Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GOLAM MOWLA whose telephone number is (571)270-5268. The examiner can normally be reached on Monday to Friday, 8 AM to 5 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JESSICA WARD can be reached on (571)272-1223. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/G. M./
Examiner, Art Unit 4132

/Jessica L. Ward/
Supervisory Patent Examiner, Art Unit 4132